

THE BURUSHO OF HUNZA

342 these narrow planks placed side by side and pierced by horizontal holes
 335 through which two parallel rods are threaded; the hinge is a longer
 177 piece of wood pointed at both ends and rotating into holes in threshold
 463 and lintel; while the whole is secured by an ingenious wooden lock.
 322 Most villages, however, now possess a carpenter or two, trained in the
 P.W.D. workshop at Gilgit and armed with plane and saw, who can pro-
 duce more Europeanized doors and cupboards, to the greater comfort
 of their owners and the selfish regret of the anthropologist. The old,
 home-made door is still in use for barn and byre.

592 Every peasant family is almost entirely self-supporting and inde-
 291 pendent, eating the produce of its own laboriously and beautifully
 177 terraced fields (PLATE I), wearing the woollen cloaks and caps spun
 and woven from the wool of its own sheep, and booted from the
 skin of its own beasts. The only foreign garments worn are the
 415 cotton shirts and trousers of comparatively recent introduction, now
 237 considered indispensable by both sexes, and the merry little cotton caps,
 281 plain or silk-embroidered, which have replaced the heavy woollen
 salvation-army bonnet of the women. Butter is made and water
 carried in skins; grain and flour are carried in skin-bags or sacks and
 stored in skin-sacks or wooden bins. Rugs, saddlebags and ropes are
 woven of goat's hair.

● 137 In a country where no unirrigated tree can grow, timber is very
 415 scarce. An old apricot or apple tree is sometimes available, or the root
 of an old vine, otherwise the only general timber is the poplar, grown
 primarily for poles and rafters, and the willow, absolutely essential for
 baskets (PLATE II), a dozen varieties of which are needed for carrying
 apricots, manure, dry leaves, straw etc., and for storing potatoes and
 dried fruit.

[134] The soil of Hunza is unimaginably poor, consisting in fact of little
 233 but powdered-up mountain side. The scarcity of water means also
 246 the non-existence of pasture, and the few animals that can be fed eke
 out a spartan existence on the scraps of grass growing on the rare semi-
 irrigated strips of hillside or beside the water-channels, and on such
 weeds amongst the growing crops as are not earmarked for human
 consumption or remain after the crops have been reaped. This scanty
 provision is supplemented by the autumn harvest of dry leaves (not
 one of which lies on the ground ungarnered), the straw and stubble,
 and occasionally a small quantity of dried grass. Only a few families
 command enough land and water to grow a little lucerne for fodder.
 233 The most livestock that the average household of 10 to 20 persons

LAND AND HOUSES IN HUNZA

and wide as possible; for bark strips are useful for many things. Some of the flakes were 3 or 4 feet long and 8 or 9 inches wide. They would be kept to make large drum-like containers for storage purposes. While the men proceeded to deal with the next tree, the women and young people filled shoulder baskets with chips and twigs and branches and carried them home to store. "Lots of firewood for a long time to come," smiled Bibi Anjir to me gleefully as she limped away as fast and as surefooted as a girl, despite the stiff leg. 314
415
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I helped, of course, with gathering up the firewood and the bark, but I was never allowed to shoulder a basket. I would have done it gladly enough many a time, but what with silly shoes (which always provoked my companions' sympathy: "It would be so much easier for you to walk safely barefoot, Mother"; I wondered, seeing that my incompetent, soft feet had been for half a century encased in foolish footgear!) and unpractised muscles a cross-country scramble unladen required all my attention. In any case, however, they would never hear of my carrying anything—"the Great must not do that," they said, and as we were enjoying so many privileges of "the Great," we had to pay the recognized penalties. 000

When the trees were all prostrate, I measured the effective poles that remained and found they ran from 50 to 60 feet: the original trees must have stood 60 or 70 feet high. The Ustád had put the saplings in himself when he walled and planted the "garden" twenty years or so before. Good timber like this is a sound investment. Sixteen good poplars go to the making of a house; up to twenty may be needed if they are smaller. If people are definitely quitting an old house for a new they will dismantle the former for the sake of rafters and cupboards, and you will occasionally see the shell of an old house standing derelict. But the cases of house-building which we actually came across were the hiving-off of son or brother and required new wood. A man who has no trees of his own to cut must, of course, buy them from some neighbour, and this, with the carpentry, will be the major expense. 342
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The Ustád had already levelled the ground for the new house beside his own, and soon the trenches were dug for the found- 342

HUNZA CRAFTS

294 all appeared to us to suggest Persian inspiration. I heard one
531 lady say with regret for a golden past: "What is the world
coming to? Why nowadays the very peasant girls embroider
silken caps for themselves!"

[439] True enough; now that a little money filters into almost
every home the women can get hold of coloured silk from
India or Kashgar, and it was a common sight to see girls and
women open a tiny home-made bag that hung on their tunic,
and take out a strip or circle of calico, a needle, and a bunch of
silk, and continue work on a dainty cap. The threads of the
cloth were carefully counted and the design traced out in black
thread. The silks they used were unspun, clinging masses that
I found impossible to handle, and how they manipulated them
so skilfully with fingers roughened, you would have thought,
by field work, I could not divine. For about 1s. 6d. they can
buy enough silk to cover one cap with minute embroidery, and
they blend their colours, red, blue, green, orange, purple,
yellow, and black, with unerring taste. We laid in a store of
their favourite shades so that on occasion we could make an
acceptable gift to a bride preparing her trousseau.

000 After a first experience of trifling gifts of balls and combs
we had decided that it would be a crime to spoil the simple,
spontaneous kindness of the children or their parents by in-
discriminate giving. So we restrained a longing to distribute
even sweets and pins, and only made an occasional present
on very special occasions or for very definite services rendered.
On the other hand, we made a note of such things as would be
useful and acceptable, and gathered a hoard of them for our
ultimate visits of farewell.

415 Amongst the women's crafts I have already mentioned the
215 neat little "ashtrays" they conjure from the residual mush
of apricot kernels after they have extracted the oil. Washing
388 is amongst them a simple matter. Having no fat, they can make
● 137 no soap, but there is a plant, called *himan*, which they grow
amongst their vegetables, the seeds of which when pounded
296 yield a delightful soapy lather. This is used for special washings
only. Every-day cotton clothes are simply rinsed in cold water,
flung on a flat stone and beaten with a wooden mallet. When

DIGRESSION TO YASIN

000 the ruins, but the manuscripts threw no light on the matter. So far as they have yet been examined they appear to be comparatively commonplace copies of already well-known sacred writings of latish date. They are now lodged in the Srinagar Museum, which is permanently closed.

Our return to Gilgit coincided (somewhat unfortunately we ungraciously felt) with the Jubilee celebrations and perforce we spent another very pleasant (but time-wasting) holiday with our most hospitable friends the Kirkbrides. It was May 13th before we were able to disentangle ourselves from Gilgit and its seductions and set our faces once more towards Hunza. The very horses seemed to scent that they were heading home and gave us of their best. The weather was now very definitely warming up, and we marched early to avoid the greater heat. Nomal and Chalt provided us as usual with loathsome milk tasting of Tom Cat. This indescribably vile flavour is due to some wild herb that grows in these neighbourhoods at certain seasons. I am not botanist enough to know its name, and it is not a plant of which I covet seeds or slips. It is mercifully unknown in Hunza.

312 As we rode through the rich, well-watered string of Nagir villages we were escorted for part of the way by various Nagir princes sent by their father to show us courtesy. Green crops, shady walnut trees and masses of blue iris and wild rose made the road enchanting, its loveliness enhanced a thousandfold by the bleakness and barrenness of the great mountains. I confess I always covet these lovely villages for Hunza, the more so that the Nagirkuts are far more slack and slovenly in their cultivation than "our" people. All the irrigation water, coming straight from the melting glaciers of Rakaposhi, was now milky and unappetizing. The Nagir people, though not actively un-

576 civil, never volunteer a greeting as you pass and never throw
643 you a kindly smile even when they speak. We noticed, too—and how it shocked our loyal Hunza folk—that the Nagir princes also were allowed to ride past unsaluted and apparently unregarded. The Mir of Nagir had been pressing in invitations to us to visit him—as soon as he had convinced himself that no great harm seemed to be accruing to Hunza from our

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presence there.

THE FIRST OF THE HARVEST

countryside was a hive of industry. We missed the larger 233
animals and learnt that they had already been taken up to the 241
tér for the summer, while the tiny lambs and kids who were
being carefully shepherded about to get what scanty grazing
they could find without trespassing into the springing crops,
demanded the unceasing vigilance of their small guardians.

The most noticeable new phenomenon was the constant 137
stream of people, men or women, stooping under huge bundles 233
of greenery till they looked in truth "like trees walking." We
had come back to find the poplars well clothed and bushy (for
poplars), giving an unwonted air of luxury to the landscape,
but now they were being ruthlessly stripped to provide fodder
for the animals, half starved throughout the winter on a diet
of dry leaves. Poplar, willow, and gindáwer are all laid under
contribution, but the new fodder has to be very carefully
issued at first lest the poor beasts should perish of its un-
accustomed succulence. I stood one day watching and photo-
graphing a minute human insect at the top of a 50 or 60 foot
poplar skilfully stripping it of its spring glory and leaving only
the tiniest green tuft at the top. A whole handsome row were
about to be similarly shorn. In a moment of thoughtlessness I
said to the peasant at my side: "They look so lovely, it does
seem a pity. . . ." He turned on me almost fiercely: "What,
Mother? Would you starve our beasts for the sake of a poplar
tree? The leaves will come again next spring. There is no cure
for a dead sheep." I stood rebuked.

No. 3 had been laying out a new vegetable plot. Apicho 244
showed me the various beds ready for beans, scarlet runners 233
(which here have yellow flowers), marrows, and greens, but
confessed that manure was their great problem. They have
only one cow, poor devils, and with the best will in the world
one cow cannot produce enough.

The end of May is the season when new saplings of poplar, 245
willow, etc., are planted, and we occasionally met people 252
carrying off bundles of them to set in place. The mills were
in action again, and such fortunate folk as had a little grain still
left from their emergency store—not, after all, exhausted by
weddings or funerals—were carrying pathetically small bags of
it to be ground.

THE FIRST OF THE HARVEST

231 to keep her strength up—and this in one of the poorest houses,
 844 where they have had no bread nor butter for themselves for
 262 weeks. *Daudo* is one of the nourishing dishes you make for a
 human mother, and the cat was such a pet that the kittens were
 considered as a birth in the family, one of the emergencies
 budgeted for. There is as little need in Hunza for an R.S.P.C.A.
 231 as for an anti-litter crusade. Everyone is devoted to his animals,
 562 and the children have pet names for every lamb and kid. You
 will often see a boy or girl carrying home a tired animal slung
 over the neck like a fashionable lady's fur. Only people who
 have lived in the East can realize how amazing was this affec-
 tionate care for a pet; or how still more amazing this happy
 family life where father could come in and find his wife and
 daughters entertaining two strange men and be obviously de-
 lighted to see the guests. At least, if this sort of thing is possible
 elsewhere in the East, I have not heard of it.

231 When we passed next day we heard that a strange cat, which
 must be the only other one in Aliábád, for in general everyone
 is too poor to keep either cat or dog, had come in while the
 mother was mouse-hunting and had killed two of the kittens.

[115] Yaman, the only brother of our most beloved young friends,
 and most intelligent of informants, lifted a pathetic little white
 body with his toes from the field to show us. The children were
 half horrified and half amused at the kittens' fate.

137 There were a few wild flowers these June days amongst the
 scanty grass of the *toqs*: red bladder campion, stitchwort, and
 an occasional starved-looking forget-me-not. The children were
 much amused when we told them what the English call it, and
 that sentimentalists amongst us use it as a love-token. After
 that, one or another would run up to us offering a tiny blue
 flower and saying, "Don't forget me!" Some future linguist,
 language-hunting like ourselves, may be puzzled to hear of *je*
til akol growing in Hunza fields and rack his brains as to how
 123 the idea came to the Karakoram. On principle we have tried
 to avoid poisoning the ground for future workers by importing
 European ideas, legends, or phrases, and in this connection the
 forget-me-not, the "one little pig" and Afrot's *How do you do?*
 are the only sins on my conscience.

THE FIRST OF THE HARVEST

all thriving. The field walls looked very jolly at this season, with wild flowers of the rock-garden type growing in the crannies between the stones and fostered by the seepage from the irrigated fields above. Amongst them was a wild mint and a wild thyme, the flavouring qualities of which are known and appreciated.

On June 12th we saw some people hungrily eyeing their barley and reckoning that it would be ripe for cutting in another fifteen days. It was said to be good this year in spite of an abnormally cold, late spring. Some rain showers that we had were welcomed though they temporarily cooled the air. But as clouds and rain continued, anxiety began to be felt lest the wheat should be late and delay too long the planting of the buckwheat-on-wheat. The barley is subject to a disease called *sam*, which stripes the leaves an ugly yellow and produces a milky liquid in the ears. Few plants were attacked this year. The disease called *motel* (rust?), which makes black ears, attacks only wheat and millet, and if the cold and rain persisted it might be expected to set in. We were doubly anxious that this year's crops should be good: unselfishly for the people's sake; selfishly lest a bad year should be attributed to the maleficent influence of two crazy people learning Burushaski—though indeed these highly rational people would be unlikely to indulge any such fantastic association of ideas.

We saw some people one day collecting the under-bark from red willow trees; they use it for dyeing the leather of their native boots and skilfully chip it out from the living tree without injuring the willow.

Now that the people were really within sight of food they frankly confessed to being desperately hungry, and the strain of unremitting work—weeding, ploughing, manuring, grafting, irrigating from dawn to dusk on empty tummies—was showing in drawn, thin faces, but appeared powerless to damp their spirits or fray their tempers. It was dreadful to look on and be helpless to feed the multitude with loaves or fishes, while we lived—sparingly enough by home standards but—riotously compared with these much more deserving neighbours. We saw one day a group of men sitting pensively under a mulberry

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No. XXXVI

Šikamatiq Čaya.

800 Humsulo joŋ dox'wəbunə Zux'w-tiqə gir'amulər səku-tiq di-mor
(or, di-mi ke) han dastutan qadi-misum bilum, i-tə i-k Šikamatiq
se-libə'n.

Šikamatiqər hə-bum jamə-at ud'im ke han pŋ-ti cəw'n (or, cəam).
3 Pŋ-ti makuti kaman yutorpus cəw'n. Isəulo čutan del tiš cəw'n.
Isə pŋ-ti-t i-k Kəli Kəb'li se-libə'n.

Betuman deniq man'i Šikamatiq Humsulo siy'w-čəw'n.

1 dox'wəbunə — An instance of the rather rare use of the Absolute Pres. pc.

137 The opening of the blossom begins first in the lower and warmer parts of
132 the valley and gradually extends up the valley and up the hillsides as warmth
increases with the advance of the season. On the hillsides facing Nagir one
may see the apricot trees at the higher levels still in full blossom when those
at the lower levels have shed their flowers.

gir'amulər — i. e. when the trees on the boundary of the lands belonging to the
Esperdiq community came into blossom. All this part of Nagir is in full view
of Naltit and the adjacent populous tract in Hunan which contains the villages
of Gansuh and Haiderabad, Alishad and Hamzahad.

840 The custom is described as a Hunan custom. I do not know whether it
now, or did, exist in Nagir.

● 137

haiyau, *hai.au* y pl. caraway seeds. —
wafumig haiyau black caraways.

The plant occurs in the higher areas of the Gilgit region, e.g. below the Darkot Pass in Yasin.

(Cp. Sh. *haiyau*.)

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haua N. "hajwa", a kind of food, sweetened with sugar, probably the equivalent of the Hx. *šardaf*. Ar. Pres.

hara'u, *hai'ra'u* astonished, perplexed, at a loss, bewildered. 29.6.6, 118.12. Ar. Pres.

herimig, *herimig* y pl. much weeping, lamenting. — *gufas apim herimig edan* they are lamenting in the absence of the corpse (i.e. for some one who has died away from home). *herimig herip bila* (for *bi?*) it is a dirge. *herimig herip edan* (the band) are playing a dirge, or are playing badly, dismally, slowly.

he, *hē*, *hai* an exclamation: hallo! — *he tik* O ground! 262.4. *hē bihel gumani* ho, bravo to you! 74.6. *hai ma hermas naxor* O my wise sirs! 88.17. **-tsi hē etas* to attack, set on, assault. *hik nal'a i-tsi hē ne* all together attacking, setting on, him. 276.9.

(QUB. distinguishes *hai* = wa, and *hē* an exclamation inciting to attack).

1. *hermas*, *heri*-, neg. *akheri*-, Impv. *hen*, neg. *akhen*, Ppa. *nul'en*, to know, understand.

The subject with all tenses usually appears in the General Oblique form.

Pres. *uqtsom ja bur' herya ba* I know much more than you. 56.1. Cp. 28.10.

gufu uyom uqs he.i ba you know all this. 86.26. Cp. 28.9. *u'me heri*

ba gufs duro bilafis etas bila ki? do you know how this is to be done?

CLASSIFIED LISTS OF BURUSHASKI WORDS.

000 Many common or important words in Burushaski have no simple equivalents in English, under which they can be entered in an Index.

Such are the names of local implements, utensils and foods, which have no exact counterparts in our culture, and words connected with ceremonies, customs and beliefs peculiar to the people.

Again, there are the names of animals, birds, insects, plants etc. to which only a specialist could attach the correct scientific labels.

Words of some of these types are collected in the following lists, but as classified lists are often convenient I have supplemented them by adding names falling within the same categories, even when more or less specific meanings have been given to them in the Vocabulary.

1. Plants.

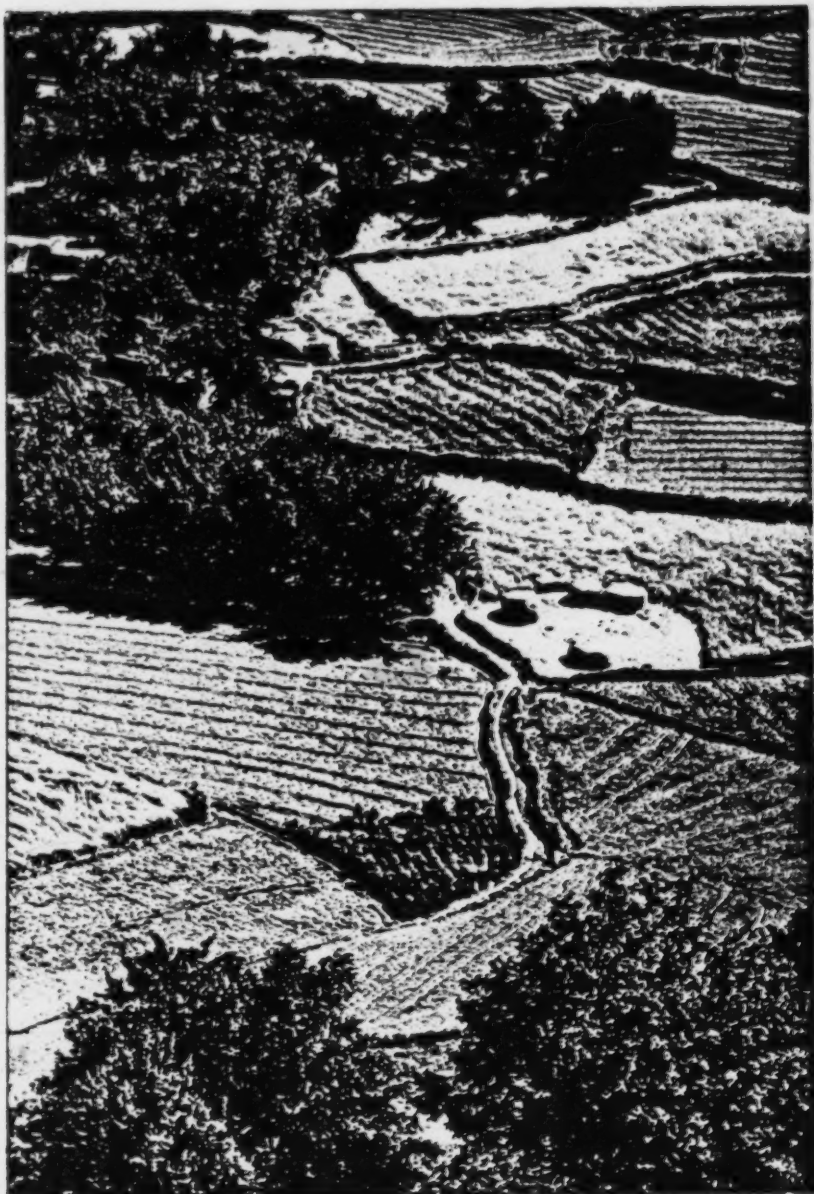
barulandil.	qomhar.	human.	sarpor.	širijun.
birgar.	filal.	jacir, cp. šacil.	sap.	šun.
bunor.	golgal.	kurpan.	soptaj.	š. tal.
čharo.	γašu.	xapkinas.	sošan.	taməku.
čhaš.	yon.	li-li.o.	supandor.	terrešk.
čopori.	γolap.	mordakay.	šāšor.	thom.
čorjal.	himan.	morgon.	šipit.	šacil.
čačaliski.	horar.	naski.	šutor.	

2. Trees.

ba'il.	quður.	hormok.	mašhali gal.	šurun.
1. bik.	2. gal.	hokor.	mojur.	šurori N.
biranč.	gaši.	1. jorpa.	pfak.	2. tal.
boš.	gaškur.	jafor.	pfelts.	tiri.
čugodər.	gindarar.	2. ju.	phašo.	torag.
dindirš.	gondaru.	kačol.	šak.	

7:Tobe C,T-3 (1959)1960 AV7 Burusho AV7
Hunza

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Hunzan fields are small, and are worked with hand tools.

[p.326-B1]

7:Tobe C,T-3 (1959)1960 AV7 Burusho AV7
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[p. 326-B2]

241 minerals and by allowing these glacial streams to be spread over the soil, the nutrients are left in the soil as the water soaks into it.

The principle of returning to the land that which belongs to the land has been and is, at the present time, scrupulously followed. The only farm implement which [407] I could find on the Hunzan farms was the primitive [492] plow and invariably it was pulled by a bullock. The plowing is never deep and is practiced chiefly to sort of clean the field, cover the organic matter that has been spread upon it or left upon it and prepare the field for the next crop.

[464] All the work that has to be done is done by hand— with or without the assistance of domesticated farm animals. There is no substitute for manual labor and the men, women and even young children share in the farm work.

[137] From what I could observe, weeds were not a problem and the reasons are clear. There are few indigenous, native plants in the area. Practically all of the growing plants that I could spy were in cultivated areas. The maxim in Hunza evidently is if a place can grow weeds, then it should be cultivated and usually that principle is followed. This all adds up to the fact that there are few weed seeds distributed in the area and therefore they are not in the soil to spring up, whenever the farmer's back is turned.

[134] I want to stress once more that the mineral requirements of the fields of the Hunza farmer are met and replenished by the fine silt, ground by the glaciers from the rocky surfaces and carried down to the Hunza farmers by the conduits and spread on their land.

Our modern civilization attaches great importance to and stresses the value of flavor and appearance in

CHAPTER 50

Flora and Fauna

123 MY VISIT to Hunza was not basically a botanical or horticultural visit, much as I would have enjoyed spending a few weeks hunting, searching, climbing, delving into crevices and peeking into and over the rocks, crannies, cliffs and river beds—yes, and fields and anywhere a bit of green could be seen.

137 The speed at which I traveled along the mountain roads was slow and tedious, but it was even slower because of my interest in horticultural specimens that I noticed here and there and which I stopped to examine. But my stops to examine the flora were not very frequent during the first few miles, due to the simple fact that there was not much flora to investigate, except the omnipresent Fog plant, which no terrain seemed to deter. Then of course, there was a great similarity in the flora and once I had seen a plant, I did not stop to investigate another of the same species.

However, I did stop often enough on plant examinations so that I was always a few miles behind my friend, Cec, who was not concerned with the flora.

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137

I want you to understand that I did not do an exhaustive detailed study of the flora of the Hunza district. I am sure there are many, many more plants in the area than I have indicated or found. I just examined what I happened to pass and see. I definitely did not go out and search for specimens away from the beaten path.

You can take my word for it, the vegetation under any and all circumstances is definitely not spectacular. However, any of the plants that are found growing in this area most certainly should be hardy enough and virile enough to do well in most other parts of the arable world.

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It is my belief that the flora of the Hunza Valley is neither varied nor numerous, apart from the fruit and nut trees which are in most cases not indigenous. The apricot, though, could be native to that part of the world . . . at least, that is what I gathered from my studies and observations.

Apricots were grown in the greatest number, followed by mulberry, walnuts, apples, plums, peaches and pears. Here and there I came upon a pomegranate tree. These, I am positive, are indigenous to the surrounding area, if not to Hunza.

[245]

The trees that I passed most frequently on the roads and trails and in the towns were eucalyptus, willow, birch, poplar and the oriental plane, sometimes called sycamore and known in Hunza as the "chenar" tree. I believe these are all native to the vicinity.

I was disappointed, surprised and even shocked to find the area completely devoid of conifers or evergreen trees. I saw one pine tree in the P.A.'s garden in

- 137 Gilgit. With the eyes of an eagle I scanned the roadways, the byways, the mountain slopes, the rocks, the cliffs, the highlands, the lowlands, but nary a conifer did I spy.

[133] One day when we got to see a different slope of Rakaposhi, I looked up and there about two-thirds of the way up on its higher reaches or slopes was a cluster of trees and they looked like and must have been conifers. But wait . . . Rakaposhi, according to the records, is 25,550 feet high. Unless I'm as blind as a bat and cockeyed, to boot, that cluster of trees was at least two-thirds of the way up. I was standing at 9,000 or 10,000 feet. So two-thirds of the remaining 15,000 feet would be 10,000 feet. So 10,000 plus 10,000 makes 20,000. Am I trying to tell you that I saw trees growing at approximately 20,000 feet? The tree experts say it couldn't be. They would scoff, deride and ridicule my statement, for it is written and believed that the timberline is somewhere around 10,000 or 11,000 feet—or does that apply only in the North American scheme of things? Well, that might be in America, but I will swear and attest that it doesn't hold true in the Himalayas or the Karakorums. Could be that I may be erring by a couple of thousand feet or even three thousand but it would still mean that this copse or group of trees was at least 17,000 feet up. Yet I know, I feel, I am convinced that it must be 20,000 feet. I repeat this even at the risk of being called a lunatic. I've been called that before!

Other writers claim they saw pines on their travels in this district. I think they were just talking or trying to grasp something to describe in that bleak, bare area. I saw the one single pine tree I mentioned earlier in Gilgit . . . and it had been planted! Well, I'll have

to let you figure it out. I'm just telling you what I saw 137 ●
and what I think.

I admit that I would very much like to some day [133]
climb and find out exactly what those trees were, but
Rakaposhi is one of the most difficult of all mountains
on earth to climb. It took 23 attempts to conquer 648
Rakaposhi. The first 22 attempts failed, but a British
expedition succeeded in scaling her summit in 1958.
One side is almost a sheer drop, so from that side I'll
stay clear. Of course there wouldn't be anything growing
there, anyway.

The ascent of Rakaposhi was accomplished by the
British Pakistan Forces Himalayan Expedition, 1958.
Captain Shah Khan, the Mir's uncle, was a member
of the expedition. I quote from the account . . .

"Captain Shah Khan was a most important and use- [485]
ful member of the expedition. He personally selected
our 6 Hunza porters, and being a Hunza man himself,
in fact the uncle of the Mir, we hoped for great things
from them. We were not in the least disappointed."

The expedition started May 12th from Gilgit and
established a base camp on May 26 at 14,000 feet. It
was on June 25th that two members of the expedition,
Mike Banks and Tom Pattey, reached the summit,
under terrible conditions of winds and drifts.

Varieties of shrubs in Hunza were more numerous. I 137
saw a few wild roses just like any wild rose you see
anywhere. The flower had a slight fragrance and was
reddish-pink in color.

Then there was a plant that resembled barberry,
except it had a blue berry instead of a red one. The
berry was edible. I tried some and found the taste
pleasing and sweet, but there was very little meat or
pulp. It was practically all skin and seeds. It was much

137 more prickly than our barberry. In fact, it seemed to have 5 prickles for every one that ours have and they were longer and stronger and more painful.

I recognized a variety of honeysuckle, too.

Then, of course, there was the imperturable "chush." It was found growing everywhere. I understand that its orange colored berries, which vary greatly in size, from that of a grain of millet to that of a large pea, also are edible, although they weren't as sweet or as pleasant tasting as the blue barberry, as I call it.

Caragana seems to grow widely in the area. I saw caragana plants ranging in size from 10-12 feet to one that was barely 6 inches tall, replete with all the trimmings, including the ripened seed pods. I stood entranced and marveled at the sturdy little plant growing out of the bit of soil that had fallen on the surface of a rock. I was strongly tempted to take some seeds back with me but I was quite certain that if the seed were sown in our fertile soils, the plant would quickly lose its dwarfing habit and only because it was so tiny did it look so cute and appealing.

Tamarix grows broadly. In fact, it is the most widely seen plant, shrub or tree in the area. On a few occasions we stopped, rested and found a bit of shade and comfort under a tamarix thicket or bush.

137
824 Herbaceous plants were more common again. At varying places along the river bank could be found fairly extensive patches. There was "fog" to which I will refer a little later, and a most formidable looking thistle, that neither man nor beast nor insect could get close to without feeling the barbs. My guides and bearers all warned me to stay away from it. I wanted to get some of its seed and feel, handle and examine it. On a few occasions I was determined to investigate it thoroughly, but they actually pleaded with me to leave it alone. It contains poison, they told me, and it would

actually make me sick and my skin would break out in sores or a rash.

In truth, I wasn't much worried, but, on the other hand, prudence must be considered. I was a long way from home, with a medicine kit that consisted of a bit of bandage and some salve, and I was in no position to do battle with some unknown, dangerous and perhaps poisonous plant. So I heeded their entreaties and left that symmetrical, unusual, neat but murderous looking plant alone.

The plants that I actually saw in flower along the trail or in the fields were very few. There was the wild rose, the fog, the inconspicuous flowers of chush and the fringed gentian and a few poppies. Remember, this was in July and very few plants, shrubs or trees are in flower at that period.

Yet, I must bear in mind that from Gilgit to beyond Altit the difference in maturity would run about two weeks. While I ate some of the last of the cherries at the Political Agent's table in Gilgit, when I got to Baltit I was eating the first of the cherries that the Mir had picked from his trees of exactly the same species and variety. In fact, I came upon many peculiarities caused by the altitude and the proximity to the river. In one place the fog plants, for example, were in flower and in other places along the route, they had already formed seed pods. Again, in other spots the seed pods had already burst.

This is not unusual, because if you examine the situation in the Niagara District, for example, at Queenston the cherries are in full blossom when in Niagara-on-the-Lake, along the lake, the buds haven't even swelled. There is a difference of 10 days to two weeks between Niagara-on-the-Lake and Queenston and the distance is a scant 7 miles.

The plant that impressed me most was the fog plant.

- 137 I've tried to locate it in my botanical encyclopedias but so far have met with failure. It appeared to be an annual but such a robust growing annual I have never known before in my life. (It could have been an herbaceous perennial—I'm not 100% certain. But I do know it started from the surface because there was no old wood or old stems on any of the thousands of plants that I saw and the hundreds that I examined closely.

If you know the winter creeper, or euonymus, then you can quickly understand what this fog plant looked like. It seemed to thrive in practically any location that would give succor to a living plant. In some places it was small and compact. In other locations it grew large and sprawling. It grew out of the rocks and hung down. It grew against the sides of the mountains and climbed up. It resembled, in many instances, a low growing shrub, but it was entirely void of wood. In other cases it grew erect and in still other places I found it sprawling around the ground in a wide area, making an excellent ground cover.

It is my estimate that I did not come across more than 30 different types of perennials or annual herbs. I am sure you will agree that it is understandable that the flora of this area would not be wide or tremendous.

- 133 Undoubtedly the valleys along the Nagir side were more lush, looked better and were larger than the cultivated areas along the Hunza side. One of the reasons for this condition is the fact that the Hunza side is more precipitous and the walls of the canyon or mountains are steeper and more sheer, leaving less opportunity for soil to accumulate, be cultivated and grow plants.

- 247 In the homes, from my observations, and I made careful study of this aspect, I did not see a sign of one

single house plant. This applies to the Nagir side as 247
well. Of course this is readily understandable when [354]
you realize that they have no glass or light. The only
light they would have in a Hunzan home would be the
bit that streaks in from the hole in the roof or through
the doorway. This lack of light would not be conducive
to growing plants indoors.

I recognized and found one lone dandelion plant and 137
believe me, when I found it, my heart was glad, gladder
than it would have been if I'd found a beautiful rose.
It has always been my belief and contention that
dandelions are found where'er plant life can survive
and this plant bore out (to a degree) my lifelong con-
tention. As long as a dandelion can be found, one need
not fear starvation. The greens of the dandelion, 000
especially when young and tender, make delicious salads
. . . but remember, be sure to get the young tender
shoots. The roots are roasted and ground, and they
make a beverage that some authorities say is as good
as coffee. The root can also be used the same as pars-
nips. Herbalists prescribe dandelion coffee for dys-
pepsia, gout and rheumatism and they claim, with
sincerity, that it possesses most beneficial properties for
such ailments. It is also recommended by the herbalists
for kidney and liver disorders and Potter says it is
perhaps one of the most generally prescribed remedies
. . . "It may be given in any form but its beneficial
action is best obtained when combined with other
agents." Now besides all the above virtues, its flowers
and milky stalks make delicious wine.

This one single lone dandelion—the only one I saw 137
on my trek—had caught a foothold in a crevice of a
rock and was growing on this steep wall. I felt like 000
embracing it and pressing it to my heart. But if I had,

133 was no basis for comparison. The Alps were pretty hills!

But here again was something entirely different. We flew through and over the Himalayas from Rawalpindi till we neared Gilgit and from the moment we saw the Karakorums I was impressed with their appearance of hardness, massiveness—yes, and their coldness, too, but they certainly weren't very cold here on our way to Chalt where the metallic content of the rock absorbs every bit of heat and seems to hold it. Whereas the [137] Rockies are mainly grassed or timbered, the Karakorums are bare, naked and distinctly metallic looking.

Of course there are bare mountains in the Rockies and there are treed and grassy ones in the Karakorums but it's the exception, in both cases, rather than the rule. Apart from a bit of grass or a few trees in an occasional valley, the mountains in general were bare rock. It is indeed a tribute to the courage, ingenuity and resourcefulness of the people of Hunza and other races who live in these rocky valleys, that they can manage to eke out an existence.

In the Rockies anything over 10,000 feet is rare and unusual. When you hit 12,000, 13,000 or 14,000 feet it is an event of major importance. But here in the Karakorums, when you are trudging along, everywhere the mountains are 14,000, 15,000 and 16,000 feet high. It seems that the ridges all around you are 12,000 to 14,000 feet, with something like Rakaposhi occasionally poking up at 25,550 feet. Even that is nothing of any spectacular mention, because within a few scant miles as the crow flies could be found ten peaks as high or higher and dozens or maybe hundreds somewhat smaller, but still much bigger and more impressive than most found in the Rockies and the Alps.

Just to illustrate my point I'll mention a few, starting at the Afghan border and working over to Singkiang

[P44-B]

AV7 Hunza AV7

Hunza

164 into the "fine, barrel chests" reported
 146 by travelers. (I found that when they
 took off their shirts the fine, barrel
 chests revealed strong asymmetry,
 with ribs notably warped by rickets.)
 During my first winter, I developed a
 typical case of beriberi, even though
 my diet was more varied than theirs
 and was adequate in quantity.

133 The basic trouble rests not with the
 161 Hunzas, who are neat, intelligent, and
 107 hard-working, but with their country.
 367 There is no flat land in all of Hunza.
 371 Villages and farms are built on alluvial
 cones—fan-shaped masses of gravel
 dumped by streams rushing from
 mountain glaciers down into the val-
 leys—and the small cultivated areas
 simply are not extensive enough to
 support the constantly increasing popu-
 lation. (The Mir estimated the popu-
 lation of his country at 25,000 in 1951.
 According to one of the last of the
 British agents stationed in nearby
 Gilgit, Hunza's population was in-
 creasing at the rate of 30 per cent each
 [67] decade. Rising emigration and the ab-
 sence of written records obscure the
 reality, as one might imagine.)

311 Hunza's slopes are so steep they
 241 must be terraced by the laborious con-
 struction of hand-built retaining walls
 of boulders. I measured one cultivated
 slope of 60 degrees—so steep that the
 retaining walls were twice as high as
 the miniature plots they supported.
 And sometimes Hunza farmers will
 even create arable soil on top of bare
 rock. After a crescent-shaped wall at
 the foot of any fairly gentle rock
 slope is built high enough so the top
 of the wall is level with the top of
 the slope, the wall is carefully chinked
 and mud-calked, then sandy water
 from the nearest irrigation ditch is
 admitted to make a small pond. When
 the sand settles out, the clear water
 is drained, and more sandy water is
 admitted. This process is repeated for
 about two years, until enough sand
 accumulates to allow cultivation.

134 Much of the "soil" of Hunza fields
 311 is thus not really soil. Rather, it is a
 jumble of unweathered boulders,
 gravel, and sand. Since Hunza is a
 [32] cool but exceedingly dry desert, prac-
 [13] tically no plant food is formed. The
 scant rain that falls soaks rapidly
 through the spongy sand, leaches out
 any trace of plant food that may be
 present, and carries it down to the
 river. Not even sagebrush will grow on
 the unirrigated areas, so most slopes
 are barren. Newly irrigated areas are